

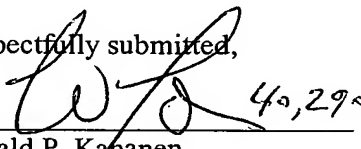
**REMARKS**

This Letter essentially restates the Articles 19 Amendments as it would apply to the English language specification. The Articles 19 Amendments have been applied to and original claims 1, 9, and 11. Original claims 4, 6, 7, 13 and 15 were cancelled. To show the changes made to the claims, copies of (1) Original Claims "A", and (2) Article 19 Amendment "B" are enclosed for convenience of understanding. Accordingly, claims 1-3, 5, 8-12, 14 and 16 are presented for examination on the merits.

Dated: May 12, 2006

Respectfully submitted,

By

  
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- A -

IAP9 Rec'd PCT/PTO 12 MAY 2006

## CLAIMS

[1] A liquid crystal display comprising two substrates on which alignment films for orienting liquid crystal in a predetermined direction are formed, the alignment films facing each other across a predetermined gap by a sealing material to bond the pair of substrates between which a liquid crystal layer is sandwiched, wherein

the sealing material contains a filler having a mean particle size of less than 0.5  $\mu\text{m}$ ,

the liquid crystal material used in the liquid crystal layer has a refractive index anisotropy at room temperature of 0.16 or more, and a cell gap is 3  $\mu\text{m}$  or less.

[2] A liquid crystal display as set forth in claim 1, wherein the liquid crystal material used in the liquid crystal layer has a refractive index anisotropy at room temperature of 0.18 or more.

[3] A liquid crystal display as set forth in claim 1, wherein the content of the filler contained in the sealing material is within a range of 15 to 40 wt%.

[4] A liquid crystal display as set forth in claim 1, wherein a maximum particle size of the filler contained in the sealing material is 1.5  $\mu\text{m}$  or less.

[5] A liquid crystal display as set forth in claim 1, wherein a specific surface area of the filler contained in the sealing material is 30  $\text{m}^2/\text{g}$  or less.

[6] A liquid crystal display as set forth in claim 1,  
wherein there is an alignment film under the seal of at  
least one substrate.

[7] A liquid crystal display as set forth in claim 1,  
5 wherein the alignment film material is an inorganic  
alignment film.

[8] A liquid crystal display as set forth in claim 3,  
wherein the alignment film material is an inorganic  
alignment film.

10 [9] A liquid crystal display as set forth in claim 4,  
wherein the alignment film material is an inorganic  
alignment film.

[10] A liquid crystal display as set forth in claim 5,  
wherein the alignment film material is an inorganic  
15 alignment film.

[11] A projection type display apparatus comprising:  
a light source,  
a condensing optical system for guiding the light  
emitted from the light source to a liquid crystal display  
20 device, and

a projection optical system for enlarging and  
projecting light modulated by the liquid crystal display  
device, wherein

the liquid crystal display device has  
25 two substrates on which alignment films for orienting

liquid crystal in a predetermined direction are formed, the alignment films facing each other across a predetermined gap by a sealing material to bond the pair of substrates between which a liquid crystal layer is sandwiched,

5       the sealing material contains a filler having a mean particle size of less than 0.5  $\mu\text{m}$ ,

the liquid crystal material used in the liquid crystal layer has a refractive index anisotropy at room temperature of 0.16 or more, and a cell gap is 3  $\mu\text{m}$  or less.

10       [12] A projection type display apparatus as set forth in claim 11, wherein the content of the filler contained in the sealing material is within a range of 15 to 40 wt%.

15       [13] A projection type display apparatus as set forth in claim 11, wherein a maximum particle size of the filler contained in the sealing material is 1.5  $\mu\text{m}$  or less.

[14] A projection type display apparatus as set forth in claim 11, wherein a specific surface area of the filler contained in the sealing material is 30  $\text{m}^2/\text{g}$  or less.

20       [15] A projection type display apparatus as set forth in claim 11, wherein there is an alignment film under the seal of at least one substrate.

[16] A projection type display apparatus as set forth in claim 11, wherein the alignment film material is an inorganic alignment film.

## PATENT COOPERATION TREATY

- B -

PCT



From the INTERNATIONAL BUREAU

To:

SATOH, Takahisa  
 Sohshin International Patent Office  
 4-2, Yanagibashi 2-chome  
 Taito-ku, Tokyo 111-0052  
 Japan

**NOTIFICATION CONCERNING  
 THE FILING OF AMENDMENTS OF THE CLAIMS**  
 (PCT Administrative Instructions, Section 417)

<b>Date of mailing</b> (day/month/year) 11 May 2005 (11.05.2005)	<b>IMPORTANT NOTIFICATION</b>
<b>Applicant's or agent's file reference</b> 04-8102-SNY	
<b>International application No.</b> PCT/JP2004/016995	<b>International filing date</b> (day/month/year) 16 November 2004 (16.11.2004)
<b>Applicant</b> SONY CORPORATION et al	

1. The applicant is hereby notified that amendments to the claims under Article 19 were received by the International Bureau on:

27 April 2005 (27.04.2005)

2. This date is within the time limit under Rule 46.1.

Consequently, the international publication of the international application will contain the amended claims according to Rule 48.2(f), (h) and (i).

3. The applicant is reminded that the international application (description, claims and drawings) may be amended during the international preliminary examination under Chapter II, according to Article 34, and in any case, before each of the designated Offices, according to Article 28 and Rule 52, or before each of the elected Offices, according to Article 41 and Rule 78.



The International Bureau of WIPO  
 34, chemin des Colombettes  
 1211 Geneva 20, Switzerland

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## CLAIMS

[1] (Amended) A liquid crystal display comprising two substrates on which alignment films for orienting liquid crystal in a predetermined direction are formed, the alignment films facing each other across a predetermined gap by a sealing material to bond the pair of substrates between which a liquid crystal layer is sandwiched, wherein

the sealing material contains a filler having a mean particle size of less than 0.5  $\mu\text{m}$  and a maximum particle size of 1.5  $\mu\text{m}$  or less,

the liquid crystal material used in the liquid crystal layer has a refractive index anisotropy at room temperature of 0.16 or more, and a cell gap is 3  $\mu\text{m}$  or less.

[2] A liquid crystal display as set forth in claim 1, wherein the liquid crystal material used in the liquid crystal layer has a refractive index anisotropy at room temperature of 0.18 or more.

[3] A liquid crystal display as set forth in claim 1, wherein the content of the filler contained in the sealing material is within a range of 15 to 40 wt%.

[4] (Deleted)

[5] A liquid crystal display as set forth in claim 1, wherein a specific surface area of the filler contained in the sealing material is 30  $\text{m}^2/\text{g}$  or less.

[6] (Deleted)

[7] (Deleted)

[8] A liquid crystal display as set forth in claim 3, wherein the alignment film material is an inorganic alignment film.

5 [9] (Amended) A liquid crystal display as set forth in claim 1, wherein the alignment film material is an inorganic alignment film.

[10] A liquid crystal display as set forth in claim 5, wherein the alignment film material is an inorganic  
10 alignment film.

[11] (Amended) A projection type display apparatus comprising:

a light source,

a condensing optical system for guiding the light  
15 emitted from the light source to a liquid crystal display device, and

a projection optical system for enlarging and projecting light modulated by the liquid crystal display device, wherein

20 the liquid crystal display device has

two substrates on which alignment films for orienting liquid crystal in a predetermined direction are formed, the alignment films facing each other across a predetermined gap by a sealing material to bond the pair of substrates  
25 between which a liquid crystal layer is sandwiched,

the sealing material contains a filler having a mean particle size of less than  $0.5\ \mu\text{m}$  and a maximum particle size of  $1.5\ \mu\text{m}$  or less,

the liquid crystal material used in the liquid crystal  
5 layer has a refractive index anisotropy at room temperature of 0.16 or more, and a cell gap is  $3\ \mu\text{m}$  or less.

[12] A projection type display apparatus as set forth in claim 11, wherein the content of the filler contained in the sealing material is within a range of 15 to 40 wt%.

10 [13] (Deleted)

[14] A projection type display apparatus as set forth in claim 11, wherein a specific surface area of the filler contained in the sealing material is  $30\ \text{m}^2/\text{g}$  or less.

[15] (Deleted)

15 [16] A projection type display apparatus as set forth in claim 11, wherein the alignment film material is an inorganic alignment film.



EXPLANATION BASED ON ARTICLE 19(1) OF TREATY

We reevaluated the direction of obtaining a right  
based on the cited references presented and thereby amended  
5 claims 1, 9, and 11 and deleted claims 4, 6, 7, 13, and 15  
in the claims described in the basic application.